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| 10/588,758 | 08/08/2006 | Naoki Yamaguchi | 060598 | 2939 |

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| EXAMINER | |
|---|---|
| CERNOCH, STEVEN MICHAEL | |
| ART UNIT | PAPER NUMBER |
| 3752 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/588,758 | YAMAGUCHI ET AL. | |
| | Examiner | Art Unit | |
| | STEVEN CERNOCH | 3752 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *20 October 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 August 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Terminal Disclaimer*

The terminal disclaimer filed on 11/13/2008 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent filed under application number 10/588,758 has been reviewed and is NOT accepted.

> The person who signed the terminal disclaimer is not recognized as an officer of the assignee, and he/she has not been established as being authorized to act on behalf of the assignee. See MPEP § 324.

An attorney or agent, not of record, is not authorized to sign a terminal disclaimer in the capacity as an attorney or agent acting in a representative capacity as provided by 37 CFR 1.34 (a). See 37 CFR 1.321(b) and/or (c).

### *Double Patenting*

All claims of this application conflict with all claims of Application No. 10/588,437, Application No. 10/588729 and Application No. 10/588779. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

All claims provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over all claims of copending Application No. 10/588,437, Application No. 10/588729 and Application No. 10/588779. Although the

conflicting claims are not identical, they are not patentably distinct from each other because the claims in the cited applications claim the same apparatus and methodology and only differ through classification.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-6 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeffries et al. (US Pat No 5,221,050) in view of Coffee et al. (US Pat No 6,595,208 B1).

Re claims 1 and 2, Jeffries et al. shows an electrostatic device (Fig. 7) configured and disposed to electrostatically charge and dispense a liquid composition from a supply to a point of dispense, wherein the device comprises: an actuator (column 10,

line 8); a high voltage generator (column 7, lines 5-13) to provide a high voltage; a power source (Fig. 7, 96) to activate said actuator and said high voltage generator; a reservoir (column 5, line 48) to contain the supply of said liquid composition; and a nozzle (column 6, line 57) to dispense the liquid composition, said nozzle being disposed at the point of dispense; and wherein the reservoir is configured to provide a removable cartridge (Fig. 5, 58), said reservoir being deformable according to inner pressure (column 5, line 48); wherein said device includes a housing (Fig. 7, 80) carrying said actuator, said high voltage generator, and said power source, said housing being formed with a concavity (40) for detachably receiving said reservoir, said housing incorporates a motor (102) which drives said actuator for operating said supplying means.

Jeffries et al. does not show a dispensing unit comprising: a suction pump in immediate upstream relation with the reservoir for supplying the liquid composition from the reservoir, said pump being mechanically connected to said actuator to be driven thereby; an emitter electrode to electrostatically charge the liquid composition, the emitter electrode being electrically connected to said high voltage generator; wherein the device further comprises a field electrode being connected to the high voltage generator for providing the entire liquid composition with more or less a common electric potential.

However Coffee et al. teaches a dispensing unit comprising: a suction pump in immediate upstream relation with the reservoir for supplying the liquid composition from the reservoir (column 2, lines 55-58 and lines 66-67 to column 3, lines 1-2), said pump

being mechanically connected to said actuator to be driven thereby; an emitter electrode (abstract, lines 1-12) to electrostatically charge the liquid composition, the emitter electrode being electrically connected to said high voltage generator; wherein the device further comprises a field electrode being connected to the high voltage generator for providing the entire liquid composition with more or less a common electric potential (abstract, lines 5-12).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have the motivation to modify the sprayer of Jeffries et al. with the pump and electrodes of Coffee et al. to provide a steady flow of fluid (column 2, lines 57-58) and to produce a charged comminuted material (abstract, lines 2-3).

Re claim 3, Jeffries et al. shows said housing further incorporating therein a frame (91) which mounts said motor as well as said high voltage generator, said frame dividing the interior space of said housing into a front compartment (84) and a rear compartment (40), said front compartment accommodating said motor and said high voltage generator, and said rear compartment defining said concavity for receiving said reservoir.

Re claim 4, Jeffries et al. shows wherein said reservoir (Fig. 7, 30) is coupled to said dispensing unit (38) and is cooperative therewith to define said cartridge.

Jeffries et al. does not show said housing comprising a positioning means with which said cartridge detachably engages for resting said reservoir in said concavity, wherein when said cartridge is engaged with said housing, the actuator detachably engaged with a mechanism to activate said supplying means, and a voltage terminal is

detachably in contact with said emitter electrode to apply said high voltage to said emitter electrode.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to show said housing comprising a positioning means with which said cartridge detachably engages for resting said reservoir in said concavity, wherein when said cartridge is engaged with said housing, the actuator detachably engaged with a mechanism to activate said supplying means, and a voltage terminal is detachably in contact with said emitter electrode to apply said high voltage to said emitter electrode, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Re claim 5, Jeffries et al. shows wherein said positioning means is a mount (Fig. 11, 212) formed at the upper end of said housing on which said dispensing unit rests.

Re claim 6, Jeffries et al. shows wherein said voltage terminal (Fig. 11, 252) is located below an opening which is formed in the mount to permit the lower end of said emitter electrode to project through the opening for contact with said voltage terminal when said dispensing unit rests on said mount.

Re claim 9, Jeffries et al. shows wherein an inner cover (column 8, line 14) is provided to be detachably placed over a top portion of said housing, said inner cover having an opening through which said nozzle (Fig. 7, 66) extends and defining around said opening a retainer (88) which is placed against a portion of said dispensing unit to hold it in position on said mount.

Re claim 10, Jeffries et al. shows wherein said housing is provided with a positioning means (Fig. 7, 40) for engagement with said inner cover to retain it on the housing.

Claims 7-8 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeffries et al. (US Pat No 5,221,050) in view of Coffee et al. (US Pat No 6,595,208 B1) as applied to claims 3 and 9 above, and further in view of Hartle et al. (US Pat No 5,725,161).

Re claim 7, Jeffries et al. shows wherein said housing has a vertical axis (column 11, lines 61-63) that defines an upper end and a lower end along said vertical axis, but does not teach said high voltage generator comprising a transformer which is arranged in stack with said motor along said vertical axis within said front compartment.

However, Hartle et al. does teach a transformer (column 1, lines 16-19).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have the motivation to modify the sprayer of Jeffries et al. with the transformer of Hartle et al. for connection the to charging electrode (column 1, line 17).

Re claim 8, Jeffries et al. shows wherein said front compartment accommodates a battery (Fig. 7, 96) energizing the motor, said battery being arranged in a side-by-side relation with said motor in a direction perpendicular to said vertical axis and arranged in stack with said transformer along said vertical axis.

Re claim 11, Jeffries et al. shows wherein said housing includes a front shell (Fig. 80) and a rear shell (86), in addition to said frame, said frame carrying said

motor, said transformer, and a battery energizing said motor, said front shell being fitted over said frame to define there between said front compartment (91), said rear shell being fitted on said frame to define there between said rear compartment (40), said front shell being formed with a battery opening through which said battery is placed on said frame, said inner cover (114) shielding said battery opening when attached to said housing.

Re claim 12, Jeffries et al. does not show wherein said housing is provided with a button for releasing said inner cover therefrom and with a switch knob for actuating said pump, an outer cover being provided to fit over said inner cover for concealing there behind said dispensing unit, said button, and said switch knob.

However Hartle et al. does teach wherein said housing is provided with a button (Fig. 1, 174) for releasing said inner cover therefrom and with a switch knob (40) for actuating said pump, an outer cover (176) being provided to fit over said inner cover for concealing there behind said dispensing unit, said button, and said switch knob.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have the motivation to modify the sprayer of Jeffries et al. with the button, cover and switch of Hartle et al. for control of actuation (column 3, lines 48-55).

***Response to Arguments***

Applicant's arguments filed 10/20/2008 have been fully considered but they are not persuasive.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant's assertion that the point of the dispense is not connected with the flexible satchet holds no water considering that if one wanted, there are two points of dispense, one being at 108 at the end of the satchet and the second being at 88 at the end of the nozzle. Applicant's argument that the further electrode of Coffee does not surround the reservoir holds no water considering no limitation exists stating that the field electrode surrounds the reservoir. Examiner would like to point out that the claimed limitation of "more or less a common electric potential" is more or less met in that the differential electric potential utilized here is small enough to be negligible.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEVEN CERNOCH whose telephone number is (571)270-3540. The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on (571)272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. C./

Examiner, Art Unit 3752

/Len Tran/
Supervisory Patent Examiner, Art Unit 3752